

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-12 (canceled)

Claim 13 (currently amended): A ~~telecommunications~~ customer terminal device comprising:

a pre-paid amount memory area configured to store pre-payment data corresponding
to a pre-paid amount of money;

a first profile memory area configured to store a dynamic client profile; and
a processor configured to:

~~debit the pre-paid amount of money from the pre-paid amount memory area,~~
~~determine [[a]] the dynamic client profile from one or more random variables~~
~~of previous connections of a customer~~ based on at least one random variable of a
previous connection,

store the dynamic client profile in the first profile memory area,

~~determine an amount for new connections~~ a present cost associated with a new
connection based on the dynamic client profile, and

~~debit the amount for new connections out of the pre-paid amount memory area~~
~~when a connection is established~~

modify the pre-payment data based on the present cost prior to termination of
the new connection.

Claim 14 (currently amended): A ~~telecommunications~~ customer terminal device
according to claim 13, further comprising a display configured to display the amount for new
connections.

Claim 15 (currently amended): A ~~telecommunications~~ customer terminal device
according to claim 14, further comprising:

a second profile memory area configured to store an overall client profile, wherein the ~~amount present cost for new connections~~ the new connection is determined based on a ~~statistical dynamic~~ the overall client profile stored in the second profile memory area, and wherein the overall client profile is derived from one or multiple random variables of previous connections of at least one group of customers of ~~[[the]]~~ a digital telecommunications network, the stored overall client profile being adapted dynamically.

Claim 16 (currently amended): A ~~telecommunications~~ customer terminal device according to claim 14, wherein the ~~random variables used to derive the dynamic client profile~~ include at least one random variable includes at least one of connection duration, time of day, day of the week, and geographic characteristics of ~~the previous connections~~ connection.

Claim 17 (currently amended): A ~~telecommunications~~ customer terminal device according to claim 14, wherein the ~~amount for new connections~~ present cost for the new connection is dependent on a statistical system load obtained from the overall client profile.

Claim 18 (currently amended): A chipcard configured for use in a telecommunications device, comprising:

a first memory area configured to store pre-payment data corresponding to a pre-paid amount of money;

~~a first profile~~ second memory area configured to store a dynamic client profile ~~which is derived from at least one random variable of previous connections of a customer; and;~~

means for determining the dynamic client profile based on at least one random variable of a previous connection;

~~a processor configured to change the dynamic client profile after a new connection, and to determine~~ means for determining a usage fee for ~~a new connections from~~ connection based on the dynamic client profile;

means for modifying the pre-payment data to reflect a deduction of the pre-paid amount of money by an amount of the usage fee; and

means for changing the dynamic client profile based on at least one random variable of the new connection.

Claim 19 (canceled)

Claim 20 (currently amended): A chipcard according to claim 18, further comprising:
a ~~second profile~~ third memory area configured to store an overall client profile,
wherein the usage fee for ~~new connections~~ the new connection is determined from a
~~statistical-dynamic~~ the overall client profile ~~stored in the second profile memory area~~, and
wherein the overall client profile is derived from at least one random variable of previous
connections of at least one group of customers of ~~[[the]]~~ a digital telecommunications
network, said overall client profile being adapted dynamically.

Claim 21 (currently amended): A chipcard according to claim 18, wherein the
~~random variables used to derive the client profile include~~ at least one random variable
includes at least one of connection duration, time of day, day of the week, and geographic
characteristics of ~~previous connections~~ the previous connection.

Claim 22 (currently amended): A chipcard according to claim 18, wherein the usage
fee for ~~new connections~~ the new connection is dependent on a statistical system load obtained
from the overall client profile.

Claim 23 (currently amended): A billing system for determining telecommunications
network usage fees, comprising:

a first profile memory area configured to store a dynamic client profile for at least one
customer of the telecommunications network, said dynamic client profile indicating an
average cost of previous connections of the customer and being derived from at least one
random variable of the previous connections ~~of the customer~~;

means for determining the at least one random variable with every new connection;

means for changing the dynamic client profile depending on the determined at least one random variable;

means for determining a usage fee based on the stored dynamic client profile;

a pre-paid amount memory area configured to store a pre-paid money amount associated with the customer; and

means for debiting said usage fee from the pre-paid money amount.

Claim 24 (currently amended): A billing system according to claim 23, further comprising a second profile memory area configured to store an overall client profile, wherein the usage fee is determined from ~~a statistical dynamic~~ the overall client profile ~~stored in the second profile memory area~~, and wherein the overall client profile is derived from at least one random variable of previous connections of at least one group of customers, the stored overall client profile being adapted dynamically.

Claim 25 (currently amended): A billing system according to claim 23, wherein the at least one random variables used to derive the client profile include variable includes at least one of connection duration, time of day, day of the week, and geographic characteristics of the previous connections.

Claim 26 (previously presented): A billing system according to claim 23, wherein the usage fee is determined based on a statistical system load obtained from the overall client profile.

Claim 27 (currently amended): A data carrier, comprising:

~~first profile storing~~ means for storing a dynamic client profile for at least one customer of a telecommunications network, said dynamic client profile indicating an average cost of previous connections of the customer and being derived from at least one ~~random~~

~~variable~~ statistical characteristic of the previous connections of the customer ~~of the digital telecommunications network;~~

means for determining at least one statistical characteristic with every new connection;

means for changing the dynamic client profile depending on the determined at least one ~~random variable~~ statistical characteristic; and

means for determining a usage fee based on the stored dynamic client profile.

Claim 28 (currently amended): A data carrier according to claim 27, further comprising ~~second profile storing~~ means for storing a statistical dynamic overall client profile, wherein the usage fee is determined from the dynamic overall client profile, and wherein the overall client profile is derived from at least one random variable of previous connections of at least one group of customers, the stored overall client profile being adapted dynamically.

Claim 29 (currently amended): A data carrier according to claim 27, wherein the ~~random variables used to derive the client profile include~~ at least one statistical characteristic includes at least one of connection duration, time of day, day of the week, and geographic characteristics of previous connections.

Claim 30 (previously presented): A data carrier according to claim 27, wherein the usage fee is dependent on a statistical system load obtained from the overall client profile.

Claim 31 (currently amended): A billing method to determine usage fees which arise through use of a digital telecommunications network, comprising:

determining statistical characteristics of previous connections of a customer;

creating a client traffic distribution curve based on the statistical characteristics;

generating a dynamic client profile based on the client traffic distribution curve;

establishing a new connection by the customer via the digital telecommunications network; and

calculating a usage fee associated with the new connection before ~~or during the establishing step based on said statistical characteristics of previous connections of the customer~~ termination of the new connection.

Claim 32 (currently amended): A billing method according to claim 31, further comprising:

determining statistical characteristics of previous connections of at least one group of users; ~~and,~~ wherein the calculating further includes calculating the usage fee based on said statistical characteristics of at least one group of users.

Claim 33 (currently amended): A billing method according to claim 31, further comprising:

~~deriving a dynamic client profile from at least one random variable of previous connections of a customer;~~

storing said dynamic client profile in a memory area of a customer telecommunications device; ~~[[and]]~~

determining at least one random variable associated with the new connection; and
~~rederiving~~ modifying said dynamic client profile ~~after new connections of said customer~~ based on the at least one random variable.

Claim 34 (currently amended): A billing method according to claim 32, further comprising:

deriving a dynamic overall client profile, comprising the statistical features of previous connections of at least one group of customers, from at least one random variable of previous connections of said at least one group of customers; and

storing said dynamic overall client profile in a memory area of a customer telecommunications device.

Claim 35 (currently amended): A billing method according to claim 33, further comprising:

updating the client profile so that ~~it contains~~ the dynamic client profile includes a value proportional to average duration price per connection of the customer.

Claim 36 (currently amended): A billing method according to claim 33, further comprising:

updating the dynamic client profile so that ~~it contains~~ the dynamic client profile includes a value proportional to average duration time of a connection of the customer.

Claim 37 (currently amended): A billing method according to claim 33, further comprising:

updating the dynamic client profile so that ~~it contains~~ the dynamic client profile includes a number of connections of the customer in pre-defined classes of duration of customer connection time.

Claim 38 (currently amended): A billing method according to claim 33, further comprising:

updating the client profile to ~~contain~~ include multi-dimensional functions of random variables of previous connections of the customer of the digital telecommunications network.

Claim 39 (currently amended): A billing method according to claim 33, ~~further comprising: deriving the client profile~~ wherein the creating of the client traffic distribution curve includes using random variables ~~which include~~ including at least one of connection duration time, time of day, day of the week, and geographic characteristics of previous connections.

Claim 40 (currently amended): A billing method according to claim 34, further comprising:

basing ~~usage fees for new connections~~ the usage fee on a statistical system load obtained from the overall client profile.

Claim 41 (canceled)

Claim 42 (currently amended): A billing method according to claim 33, further comprising[[,]]:

informing the customer of said usage fee before establishment of the new connection;
and

allowing the customer to interrupt the ~~connection~~ establishment of the new connection based on the informing.

Claim 43 (currently amended): A ~~billing method according to claim 32~~ for billing a new connection in a telecommunications network, further comprising:

determining group statistical characteristics of previous connections of at least one group of users of the telecommunications network;

determining customer statistical characteristics of previous connections of a customer of the telecommunications network;

deriving a dynamic client profile ~~from at least one random variable of previous connections of a customer~~ based on at least one of the group statistical characteristics and the customer statistical characteristics;

storing said dynamic client profile in a memory area of a customer telecommunications device; [[and]]

establishing a new connection by the customer via the telecommunications network;
calculating, based on the dynamic client profile, a usage fee for the new connection;
and

~~rederiving~~ modifying said dynamic client profile ~~after new connections of said customer~~ based on at least one random variable associated with the new connection.

Claim 44 (currently amended): A billing method according to claim 43, further comprising:

updating the client profile so that ~~it contains~~ the dynamic client profile includes a value proportional to average duration price per connection of the customer.

Claim 45 (currently amended): A billing method according to claim 43, further comprising:

updating the client profile so that ~~it contains~~ the dynamic client profile includes a value proportional to average duration time of a connection of the customer.

Claim 46 (currently amended): A billing method according to claim 43, further comprising:

updating the client profile so that ~~it contains~~ the dynamic client profile includes a number of connections of the customer in pre-defined classes of duration of customer connection time.

Claim 47 (currently amended): A billing method according to claim 43, further comprising:

updating the client profile to contain multi-dimensional functions of random variables of previous connections of the customer ~~of the digital telecommunications network~~.

Claim 48 (currently amended): A billing method according to claim 43, ~~further comprising: deriving the client profile~~ wherein the determining of the customer statistical characteristics includes using random variables which include at least one of connection duration time, time of day, day of the week, and geographic characteristics of previous connections.

Claim 49 (currently amended): A billing method according to claim 43, ~~further comprising: determining usage fees for new connections from the stored dynamic client profile when the connection is established~~ wherein the calculating is performed before termination of the new connection.

Claim 50 (currently amended): A billing method according to claim 43, further comprising[[],]:

informing the customer of said usage fee before establishment of the new connection;
and

allowing the customer to interrupt the ~~connection~~ establishment of the new connection based on the informing.

Claim 51 (new): A method for determining usage fees in a telecommunications network, comprising:

generating an overall client profile based on random variables associated with previous connections of a plurality of customers of the telecommunications network;

generating a customer client profile for a customer of the telecommunications network based on the overall client profile;

requesting a new connection by the customer;

determining a usage fee for the new connection based on the customer client profile;

establishing the new connection;

debiting the usage fee from a pre-paid amount before the new connection is terminated;

determining random variables associated with the new connection; and

modifying the customer client profile based on the random variables associated with the new connection.

Claim 52 (new): The method of claim 51, wherein the generating of the overall client profile further includes generating an overall client traffic distribution.

Claim 53 (new): The method of claim 52, wherein the generating of the overall client profile further includes determining, based on the overall client traffic distribution, at least one of a mean value, a variance, a class, a moving average, and a distribution in a pre-defined class.

Claim 54 (new): The method of claim 51, wherein the determining of the usage fee is performed by a customer telecommunications device.

Claim 55 (new): The method of claim 51, wherein the determining of the usage fee includes determining revenue figures associated with the previous connections of the plurality of customers.

Claim 56 (new): The method of claim 55, wherein the determining of the revenue figures includes determining a mean time-per-connection and a mean revenue-per-connection.

Claim 57 (new): The method of claim 51, further comprising:
storing the overall client profile and the customer client profile in a customer telecommunications device.

Claim 58 (new): The method of claim 51, further comprising:
storing the overall client profile and the customer client profile on an SIM card.

Claim 59 (new): The method of claim 51, further comprising:
requesting a second new connection; and
determining a second usage fee for the second new connection based on the modified customer client profile.

Claim 60 (new): The method of claim 51, further comprising:

Application No. 09/508,422

Reply to Office Action of August 2, 2004

comparing the usage fee with an available pre-paid amount, wherein the establishing occurs when the available pre-paid amount exceeds the usage fee.